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Notice of Allowability	Application No.	Applicant(s)	
	10/022,211	YOON, YEO-CHANG	
	Examiner	Art Unit	
	Hien Vo	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 7/8/2003.
2. ☒ The allowed claim(s) is/are 1-57.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/066,532.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date 4/8/03.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
|---|---|


 John E. Barlow Jr
 SPE
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DETAILED ACTION

1. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because proposed corrected drawings of Figures 1A and 2 (Amended), which were submitted on 3/8/2002, have alternations and is considered to be informal. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Amend the abstract, as follows:

[[A method for controlling the power consumption in a tilt correcting coil is disclosed. The power consumption is corrected]] Controlling power consumption in the tilt correcting coil [[for correcting]] to correct the tilt of [[the]] images [[of]] on the cathode ray tube. [[If]] When a microcomputer judges that the mode is the on-state mode, [[then]] the microcomputer outputs a tilt correcting PWM signal in accordance with the user's [[inputting]] input. [[Then the]] The output tilt correcting PWM signal is converted into a dc voltage, and the level is adjusted. Then the signal is supplied to the tilt correcting coil, so that the tilt of the image on the screen [[would be]] is corrected. In the [[cases of the]] standby mode, [[the]] suspend mode [[and/or]] or [[the]] power-off mode, the microcomputer outputs a signal [[which has a function of minimizing the]] to minimize power consumption [[of]] by the tilt correcting coil. [[Therefore, the tilt]] Tilt of the image

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of the screen is corrected in the normal manner in the on-state mode and, [[. On the other hand,]] in [[the cases of]] the standby mode, [[the]] suspend mode [[and/or]] or [[the]] power-off mode, the tilt correcting coil does not consume any power, thereby satisfying the power consumption definition of the power-off mode.

Amend the claims, as follows :

8. The apparatus as set forth in claim 6, said microcomputer outputting a signal having a constant high logic level, when either one of said [[of]] horizontal and vertical synchronizing signals are not output from said computer, for preventing said tilt correcting coil from consuming power.

9. The apparatus as set forth in claim 6, wherein said microcomputer determines said monitor is to operate in said on-state mode when both of said [[of]] horizontal and vertical synchronizing signals are output from said computer, and determines said monitor is to operate in one of said suspend, standby and power-off modes when at least one of said [[of]] horizontal and vertical synchronizing signals is not output from said computer; said microcomputer outputting said tilt correcting pulse width modulated signal, when said monitor is determined to be operating in said on-state mode; and said microcomputer outputting a signal having a constant high logic level, when said monitor is determined to be operating in one of said suspend, standby and power-off modes, for preventing said tilt correcting coil from consuming power.

11. The apparatus as set forth in claim 6, further comprising: said integrator comprising:
a first resistor connected between a first node and said microcomputer, and a capacitor connected between said first node and a ground terminal; said tilt correcting signal output circuit comprising:

a first amplifier having a negative input terminal, a positive input terminal and an output terminal;

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a second resistor connected between said first node and said negative input terminal of said first amplifier;

a dividing circuit connected between a power source and said ground terminal for providing a divided voltage signal to said positive input terminal of said first amplifier;

a feedback resistor connected between said negative input terminal and said output terminal of said first amplifier;

a second amplifier having a negative input terminal, a positive input terminal and an output terminal, said ~~[[negative]]~~ positive input terminal of said second amplifier being connected to said output terminal of said first amplifier;

said output terminal of said second amplifier being connected to a first terminal of said tilt correcting coil;

a second capacitor connected between said first terminal of said tilt correcting coil and a second terminal of said tilt correcting coil;

a grounding resistor connected between said second terminal of said tilt correcting coil and said ground terminal; and

a second feedback resistor connected between said second terminal of said tilt correcting coil and said negative input terminal of said second amplifier.

12. The apparatus as set forth in claim 6, further comprising:

a keyboard connected to said microcomputer, said microcomputer setting a tilt correcting value for images on a screen of said monitor in accordance with key signals output from said keyboard and outputting said tilt correcting pulse width modulated ~~[[P]]~~ signal in accordance ~~[[to]]~~ with said tilt correcting value.

Allowable Subject Matter

3. Claims 1-57 allowed.

4. The following is an examiner's statement of reasons for allowance:

For claims 1, 4, 6, 13, 20, 27, 34, 37, 39, 42, 44, 46-49, 51, 53, and 55, the prior art disclosed some claimed limitations. For example U.S. Patent No. 5,714,843 discloses an improved spot elimination circuit for a monitor which includes determining the synchronization signals from the computer, operating the monitor in an on-state mode, suspend mode, standby mode and a power-off mode of a display power management system when it is determined the synchronization signals are received or are not received by the monitor. However, the prior art does not teach singularly or in combination a tilt correcting signal to the tilt correcting coil when operating the monitor in the on-state mode or preventing provision of the tilt correcting signal in the monitor's suspend, standby and power-off modes, enabling or disabling the tilt correction coil during the normal operating mode or power saving mode of the monitor, withholding the tilt correcting signal being used by the tilt correcting coil of the monitor when operating the monitor in an activity state corresponding to reduce power consumption for the monitor.

Contact Information

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

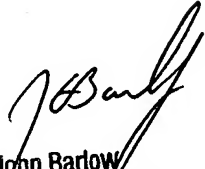
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (571)272-2282. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Hien Vo
March 7, 2007


John Barlow
Supervisory Patent Examiner
Technology Center 2800